

Serial No.: 10/535,310  
 Attorney's Docket No.: 28955.1049

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IN THE CLAIMS:

1. (Currently Amended) An organic electroluminescence element comprising:  
 an anode;  
 a first emitting layer comprising at least a first host material and a first dopant;  
 a second emitting layer comprising at least a second host material and a second dopant;

[[and]]

an electron injecting layer; and

a cathode in the order mentioned,

wherein the energy gap  $E_{gh1}$  of the first host material, the energy gap  $E_{gd1}$  of the first dopant, the energy gap  $E_{gh2}$  of the second host material, and the energy gap  $E_{gd2}$  of the second dopant satisfy the following formulas [i] to [iv];

the luminescent intensity  $I1$  at the maximum luminescent wavelength of an emission spectrum derived from the first emitting layer, and the luminescent intensity  $I2$  at the maximum luminescent wavelength of an emission spectrum derived from the second emitting layer satisfy the following formula [v]; and

~~the affinity level  $A_{d1}$  of the first dopant and the affinity level  $A_{d2}$  of the second dopant satisfy the following formula:~~

the electron mobility of the electron injecting layer is  $10^{-4} \text{ cm}^2/(\text{V} \cdot \text{sec})$  or more;

$$E_{gh1} > E_{gd1} \quad [i]$$

$$E_{gh2} > E_{gd2} \quad [ii]$$

$$E_{gd1} > E_{gd2} \quad [iii]$$

$$E_{gd1} > 2.7 \text{ eV} \quad [iv]$$

$$I1 > 3.5 \times I2 \quad [v]$$

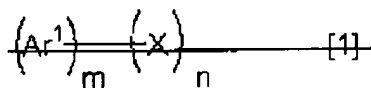
$$A_{d1} < A_{d2};$$

~~at least one of the first host material and the second host material is a compound~~

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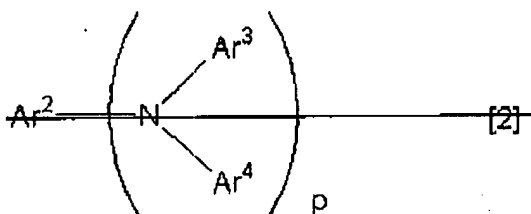
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represented by a formula [1]:



wherein  $\text{Ar}^1$  is an aromatic ring with 6 to 50 nucleus carbons, X is a substituent, m is an integer of 1 to 5 and n is an integer of 0 to 6, provided that when m is 2 or more, the plurality of  $\text{Ar}^1$  may be the same as or different from each other, and when n is 2 or more, the plurality of Xs may be the same as or different from each other; and

at least one of the first dopant and the second dopant is a compound represented by a formula [2]:



wherein each of  $\text{Ar}^2$  to  $\text{Ar}^4$  is a substituted or unsubstituted aromatic group with 6 to 50 nucleus carbons, or a substituted or unsubstituted styryl group; and p is an integer of 1 to 4; provided that when p is 2 or more, the plurality of  $\text{Ar}^3$  and  $\text{Ar}^4$  may be the same as or different from each other.

2. (Original) An organic electroluminescence element according to claim 1, wherein the following formula is satisfied:

$$I1 > 5 \times I2.$$

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3. (Previously Presented) An organic electroluminescence element according to claim 1, wherein  $E_{g2}$  is more than 2.7 eV.
4. (Cancelled)
5. (Previously Presented) An organic electroluminescence element according to claim 1, wherein the ratio of the first dopant to the first host material is 0.1 to 10 mol% in the first emitting layer.
6. (Previously Presented) An organic electroluminescence element according to claim 1, wherein the ratio of the second dopant to the second host material is 0.1 to 10 mol% in the second emitting layer.
7. (Cancelled)
8. (Previously Presented) An organic electroluminescence element according to claim 1, wherein the first host material is the same as the second host material.
9. (Cancelled)
10. (Previously Presented) An organic electroluminescence element according to claim 1, wherein the first emitting layer has a film thickness of 10 nm or more.
11. - 12. (Cancelled)

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13. (Currently Amended) An organic electroluminescence element according to claim [[12]] 1, wherein the electron injecting layer comprises one or more organic compounds comprising a nitrogen-containing heterocyclic derivative.

14. (Currently Amended) An organic electroluminescence element according to claim [[13]] 10, wherein the organic compound(s) is/are an imidazopyrazine derivative and/or an imidazole derivative.

15. (Currently Amended) The organic electroluminescence element according to claim [[1]] 19, wherein Ar<sup>1</sup> is selected from the group consisting of phenyl, naphthyl, anthracene, acenaphthylene, fluorene, phenanthrene, fluoranthene, triphenylene, pyrene, chrysene, perylene, and trinaphthylene; and

X is selected from the group consisting of substituted or unsubstituted aromatic groups with 6 to 50 nucleus carbons, substituted or unsubstituted aromatic heterocyclic groups with 5 to 50 nucleus carbons, substituted or unsubstituted alkyl groups with 1 to 50 carbons, substituted or unsubstituted alkoxy groups with 1 to 50 carbons, substituted or unsubstituted aralkyl groups with 1 to 50 carbons, substituted or unsubstituted aryloxy groups with 5 to 50 nucleus atoms, substituted or unsubstituted arylthio groups with 5 to 50 nucleus atoms, substituted or unsubstituted carboxyl groups with 1 to 50 carbons, substituted or unsubstituted styryl groups, halogen groups, a cyano group, a nitro group, and a hydroxyl group.

16. (Cancelled)

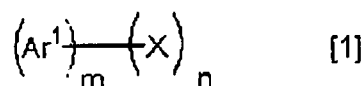
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17. (Currently Amended) The organic electroluminescence element according to claim [[1]] 20, wherein each of Ar<sup>2</sup> to Ar<sup>4</sup> is selected from the group consisting of phenyl, 1-naphthyl, 2-naphthyl, 9-phenanthryl, 1-naphthacenyl, 2-naphthacenyl, 9-naphthacenyl, 1-pyrenyl, 2-pyrenyl, 4-pyrenyl, 2-biphenyl, 3-biphenyl, 4-biphenyl, o-tolyl, m-tolyl, p-tolyl, p-t-butylphenyl, 2-fluorenyl, 9,9-dimethyl-2-fluorenyl, ~~3-fluorantenyl~~ 3-fluoranthenyl, 2-phenyl-1-vinyl, 2,2-diphenyl-1-vinyl, and 1,2,2-triphenyl-1-vinyl.

18. (Currently Amended) The organic electroluminescence element according to claim 4, wherein each of Ar<sup>2</sup> to Ar<sup>4</sup> is selected from the group consisting of phenyl, 1-naphthyl, 2-naphthyl, 9-phenanthryl, 1-naphthacenyl, 2-naphthacenyl, 9-naphthacenyl, 1-pyrenyl, 2-pyrenyl, 4-pyrenyl, 2-biphenyl, 3-biphenyl, 4-biphenyl, o-tolyl, m-tolyl, p-tolyl, p-t-butylphenyl, 2-fluorenyl, 9,9-dimethyl-2-fluorenyl, ~~3-fluorantenyl~~ 3-fluoranthenyl, 2-phenyl-1-vinyl, 2,2-diphenyl-1-vinyl, and 1,2,2-triphenyl-1-vinyl.

19. (New) The organic electroluminescence element according to claim 1, wherein at least one of the first host material and the second host material is a compound represented by a formula [1]:

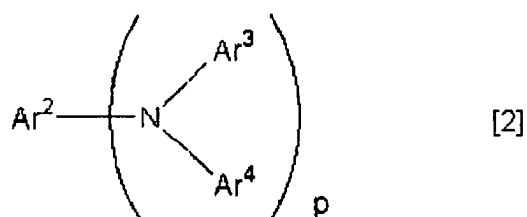


wherein Ar<sup>1</sup> is an aromatic ring with 6 to 50 nucleus carbons, X is a substituent, m is an integer of 1 to 5 and n is an integer of 0 to 6, provided that when m is 2 or more, the plurality of Ar<sup>1</sup> may

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be the same as or different from each other, and when n is 2 or more, the plurality of Xs may be the same as or different from each other.

20. (New) The organic electroluminescence element according to claim 1, wherein at least one of the first dopant and the second dopant is a compound represented by a formula [2]:



wherein each of  $\text{Ar}^2$  to  $\text{Ar}^4$  is a substituted or unsubstituted aromatic group with 6 to 50 nucleus carbons, or a substituted or unsubstituted styryl group; and p is an integer of 1 to 4; provided that when p is 2 or more, the plurality of  $\text{Ar}^3$  and  $\text{Ar}^4$  may be the same as or different from each other.